Page 1 of 2

Michigan Department Of Transportation 5100B (1G/14)

# CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

			and the second s			
			REQUISITION NUMBER	DUE DATE	TIME DUE	
MDOT PROJECT MAN	NAGER		JOB NUMBER (JN)	CONTROL SECTION (CS)		
DESCRIPTION						
MDOT PROJECT MANA	AGER: Check all items t	o be included in RFP	CONSULTANT: Provide only che	ecked items below in p	roposal	
Charak tha	WHITE = REQUIRED  ** = OPTIONAL	av halav				
Check the	appropriate Tier in the t	oox below				
TIER 1 (\$50,000 - \$150,000)	TIER II (\$150,000-\$1,000,000)	TIER III (>\$1,000,000)				
			Understanding of Service **			
			Innovations			
			Organizational Chart			
			Qualifications of Team			
Not required as part of Official RFP	Not required as part of Official RFP		Quality Assurance/Quality Control	**		
			Location: The percentage of wor used for all selections unless the p survey activities, then location sho from the consultant office to the or	project is for on-site in	spection or ne distance	
N/A	N/A		Presentation **			
N/A	N/A		Technical Proposal (if Presentatio	n is required)		
3 pages (MDOT Forms not countedDÜ^•	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP not including key personnel			

PROPOSAL AND BID SHEET EMAIL ADDRESS - mdot-rfp-response@michigan.gov

### **GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

#### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

**5100D** – Request for Proposal Cover Sheet

5100J - Consultant Data and Signature Sheet (Required for all firms performing non-prequalified services on this project.)

(These forms are not included in the proposal maximum page count.)

guidance's contained therein.

# **REQUEST FOR PROPOSAL**

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest (Consultant/Vendor Selection Guidelines for Services ContractsÈ Á

••••					
RFP SPECIFIC INFORMATION					
■ ENGINEERING SERVICES ■ BUREAU OF TRA	ANSPORTATION PLANNING OTHER				
THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY F	REQUESTS FOR PROPOSALS				
□ NO □ YES	DATED THROUGH				
Prequalified Services – See the attached Scope of Services for required Prequalification Classifications.	Non-Prequalified Services – If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, is on file with MDOT's Office of Commission Audits This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. Form 5100J is required with proposal for all firms				
	performing non-prequalified services on this project.				
Qualification Based Selection - Use Consultant/Vendor S	Selection Guidelines.				
<b>For all Qualifications Based Selections</b> , the selection team we considered most qualified to perform the services based on the proposal. Negotiations will be conducted with the firm selected.	proposals. The selected firm will be asked to prepare a priced				
For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.					
Qualification Based Selection / Low Bid – Use Consulta additional information.	nt/Vendor Selection Guidelines. See Bid Sheet instructions for				
For Qualification Review/Low Bid selections, the selection team established qualification threshold and with the lowest bid will be					
Best Value – Use Consultant/Vendor Selection Guidelines The bid amount is a component of the total proposal score, not	s, See Bid Sheet Instructions below for additional information. the determining factor of the selection.				
Low Bid (no qualifications review required – no proposal re	equired.)				
BID SHEET INSTRUCTIONS	-				
Bid Sheet(s) are located at the end of the Scope of Services. So email address: <a href="mailto:mdot-rfp-response@michigan.gov">mdot-rfp-response@michigan.gov</a> . Failure to co from consideration.	ubmit bid sheet(s) with the proposal, to the omply with this procedure may result in your bid being rejected				
PARTNERSHIP CHARTER AGREEMENT					
MDOT and ACEC created a Partnership Charter Agreement whic successful partnering. Both the Consultant and MDOT Project M					

Partnership Charter Agreement and are asked to follow all communications, issues resolution and other procedures and

# NOTIFICATION MANDATORY ELECTRONIC SUBMITTAL

## Proposals submitted for this project must be submitted electronically.

## The following are changes to the Proposal Submittal Requirements:

- Eliminated the Following Requirements:
  - > Safety Program
  - > Communication Plan
  - > Past Performance as a separate section
  - > Separate section for DBE Statement of goals. Include information in Qualification of Team section
- Implemented the Following Changes:
  - ➤ All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - > Only Key (lead) staff resumes may be submitted
  - > Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined 5100D
  - ➤ Forms 5100B and 5100H combined 5100B
  - > RFP's will be posted on a weekly basis -- on Mondays

#### The following are Requirements for Electronic Submittals:

- Proposals <u>must</u> be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include "N/A" after the bookmark title.

**Example:** Understanding of Service – N/A

- Proposals must be assembled and saved as a single PDF file
- PDF file <u>must</u> be 5 megabytes or smaller
- PDF file must be submitted via e-mail to MDOT-RFP-Response@michigan.gov
- MDOT's requisition number and company name <u>must</u> be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX\_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals <u>must</u> be *received* by MDOT on or before the due date and time specified in each RFP

# If the submittals do not comply with the requirements, they may be determined unresponsive.

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. Consultants are responsible for ensuring the MDOT receives the proposal on time.

\*\*Contact Contract Services Division immediately at 517-373-4680 if you do not get an autoresponse\*\*

# **Required Bookmarking Format:**

- I. Request for Proposal Cover Sheet Form 5100D
  - A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
- II. Understanding of Service
  - A. Innovations
- III. Qualifications of Team
  - A. Structure of Project Team
    - 1. Role of Firms
    - 2. Role of Key Personnel
  - B. Organization Chart
  - C. Location
- IV. Quality Assurance / Quality Control Plan
- V. Resumes of Key Staff
- VI. Pricing Documents/Bid Sheet (if applicable)

2/14/12

.

# NOTIFICATION E-VERIFY REQUIREMENTS

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: <a href="http://www.dhs.gov/E-Verify">http://www.dhs.gov/E-Verify</a>.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

9/13/12

# **Michigan Department of Transportation**

# SCOPE OF SERVICE FOR TRAFFIC SIGNAL DESIGN SERVICES

**CONTROL SECTION(S):** 50900

**JOB NUMBER(S):** 116309C

## **SIGNAL LOCATIONS:**

- 1. M-53 NB Off Ramp at M-59 (50013-01-005)
- 2. M-53 SB Off Ramp at M-59 (50013-01-105)
- 3. M-53 NB On, Off Ramps at M-59 WB (50013-01-205)
- 4. I-696 WB Service Drive At Hoover (50061-01-003)
- 5. I-696 EB & WB Service Dr at Arsenal Ave (50061-01-006)
- 6. I-696 EB & WB Serive Dr at Ryan Rd (50061-01-010)
- 7. I-696 EB Service Dr at Hoover Rd (50061-01-103)
- 8. I-696 EB & WB Service Dr at Barkman (50062-01-005)
- 9. M-19 at Bordman (50091-01-001)
- 10. I-94 Off Ramps at Little Mack (50111-01-009)
- 11. I-94 WB Off Ramp at 21 Mile Rd (50111-01-107)
- 12. I-94 WB Off Ramp at M-59 (50111-01-118)
- 13. M-59 WB at I-94 EB On Ramp (50111-01-218)
- 14. I-94 NB Off Ramp at M-29 (50112-01-001)

#### PROJECT DESCRIPTION:

Signal modernization design including design survey, ADA ramp design, and maintenance of traffic document preparation

**ANTICIPATED SERVICE START DATE:** September 2015

**ANTICIPATED SERVICE COMPLETION DATE:** December 2016

**DBE PARTICIPATION REQUIREMENT: 0%** 

#### PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Traffic Signal Design

## **SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Road Design Surveys

Roads and Streets

Maintaining Traffic Plans and Provisions

# PREFERRED QUALIFICATIONS AND CRITERIA (FOR NON-CLASSIFIED SERVICES):

#### 1) UTILITY COORDINATION

MDOT shall be responsible for project Utility Coordination

# **MDOT PROJECT ENGINEER MANAGER:**

Spiro Kotsonis Senior Contracts Project Manager – Design Macomb-St. Clair TSC 26170 21 Mile Road Chesterfield Twp, MI 48051 586-421-3953 586-598-4043 (fax) kotsoniss@michigan.gov

## **CONSTRUCTION COST:**

A. The estimated cost of construction is: \$1,700,000

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.

#### REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Published MDOT Design Advisories, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

The Consultant is required to use the MDOT Current Version of Bentley Microstation/GEOPAK or PowerGEOPAK (published at Section 2.2.2 of the Design Submittal Requirements) with the current MDOT workspace (published at Section 2.2.1 of the Design Submittal Requirements). 3D Models are required for all applicable projects. See Chapter 2 of the Design Submittal Requirements for a complete listing of applicable projects. The consultant shall comply with all MDOT CADD standards and file naming conventions.

2

## **MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  - 1. Project related meetings
  - 2. Base Plan Review
  - 3. The Plan Review
  - 4. Omissions/Errors/Check
  - 5. Utility Coordination Meeting(s) *Unless otherwise noted in the Scope of Service for Utility Coordination*
  - 6. Final Trnsport item cost estimates
- B. Furnish pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.
- D. Obtain all permits for the project as outlined in previous section.
- E. Coordinate any necessary utility relocation(s) Unless otherwise noted in the Scope of Service for Utility Coordination
- F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

### **CONSULTANT RESPONSIBILITIES:**

Complete the design of this project including, but not limited to the following:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. Perform design surveys.
- B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.
- C. Compute and verify all plan quantities.

- D. Prepare staging plans and special provisions for maintaining traffic during construction.
- E. Provide solutions to any unique problems that may arise during the design of this project.
- F. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.
- G. Maintain a Design Project Record in ProjectWise, which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- H. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).
- I. The Consultant shall prepare and submit in ProjectWise (in PDF format) a CPM network for the construction of this project.
- J. The Consultant representative shall record the minutes and submit in ProjectWise (in PDF format), for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for The Plan Review Meeting.
- K. The Consultant will provide to MDOT, by entering into MDOT ProjectWise at the scheduled submittal dates, electronic documents (in PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.
- L. Prepare and submit electronically (native format or PDF) into MDOT ProjectWise, any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.
- M. Attend any project-related meetings as directed by the MDOT Project Manager.
- N. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.

- O. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project**. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- P. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- Q. The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.
- R. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.
- S. The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW).

  This information can be obtained through Joe Rios, Utilities/Permits Section, Development Services Division at (517) 241-2103.
- T. On the first of each month, the Consultant Project Manager shall submit in ProjectWise a monthly project progress report to the Project Manager.

#### **DELIVERABLES:**

The Consultant shall enter in MDOT ProjectWise, in the appropriate folders all electronic files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Designer Templates etc.) as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are published monthly to the MDOT website. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted, to MDOT ProjectWise, in the appropriate folders, in their native format with standard naming conventions as well as combined into one PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capture a legally signed document or a hard copy version of a document is all that exists.

Plan sheets shall be submitted to MDOT ProjectWise in the appropriate folders in a set in PDF 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the PDF set. The original title sheet shall be sent to the MDOT Project Manager.

Reference Information Documents (RID) shall be entered into MDOT ProjectWise in the appropriate folder with standard naming conventions and content at milestone submittals as defined by <u>Chapter 4</u> of the <u>Design Submittal Requirements</u>. The RID files included will depend on the design survey deliverables and project template (See <u>Chapter 2</u> of the <u>Design Submittal Requirements</u>). These files range from CADD, existing terrain, proposed cross sections, 3D models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the txt and xml files necessary for import into the Trns\*port bid letting software. The SAPW files shall be entered into MDOT ProjectWise in the appropriate folder.

The project removal, construction, and profile sheets will require a scale of 1"=80' or as approved by the Project Manager. See Section 1.02.12 of the Road Design Manual for further direction.

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant's Monthly Progress Reports.

MDOT Preconstruction Tasks Consultant Checklist P/PMS Form Only

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

Version 13 Updated 03-02-2015

For questions on specific tasks, refer to the P/PMS Task Manual located on the <u>MDOT Website</u>. For assistance in accessing this manual, please contact:

Dennis Kelley: (517) 373-4614

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the <u>P/PMS Task Manual</u> for more details. Scheduling assistance may be accomplished with estimated completion dates. While not part of P/PMS, an Authorization Milestone and Post-Design Tasks have been included for your reference.

# STUDY (EARLY PRELIMINARY ENGINEERING)

			P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)		
YES	NO	CON	SULTANT CONTRACT AUTHORIZATION/EXECUTION	/	/		
		<u>INFOR</u>	MATION GATHERING/STUDIES				
	Х	1115	Traffic Data Collection for Studies	/	/		
	Х	1120	Prepare Traffic Analysis Report for Studies	/	/		
	Х	1125	Traffic Capacity Analysis for Studies	/	/		
	Х	1155	Request/Perform Safety Analysis for Studies	/	/		
	Х	1300	Traffic Impact Study	/	/		
	Χ	1350	Determine Need for Interstate Access Change Request	/	/		
	Х	1400	Feasibility Study	/	/		
	Х	1500	Corridor Study	/	/		
	Х	1555	Interstate Access Change Request	/	/		
	Х	<u>155M</u>	FHWA Approval of Interstate Access Change Request	/	/		
	Х	1600	Access Management Study Plan	/	/		
	Х	1700	Other Miscellaneous Studies	/	/		
		EPE S	COPING ANALYSIS				
	Х	2100	Scope Verification and Initiation of EPE Activities	/	/		
	Х	2115	Prepare Traffic Analysis Report for EPE/Design	/	/		
	Х	2120	Traffic Data Collection for EPE/Design	/	/		
	Х	2125	Traffic Capacity Analysis for EPE/Design	/	/		
	Χ	2130	Prepare Project Purpose and Need	/	/		
	Х	<u>213M</u>	Concurrence by Regulatory Agencies with the Purpose and Need	/	/		
	Х	2140	Develop and Review Illustrative Alternatives	/	/		
	Х	2155	Request/Perform Safety Analysis for EPE/Design	/	/		
	Х	2160	Prepare and Review EIS Scoping Document	/	/		
	Х	<u>216M</u>	Public Information Meeting	/	/		

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

# STUDY (EARLY PRELIMINARY ENGINEERING) (cont'd)

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	NO		(mm/dd/yyyy)
		EPE DRAFT ANALYSIS	
	Х	2310 Conduct Technical SEE Studies	/ /
	Х	2311 Cultural Resources Survey	/ /
	X	2312 Recreational Survey – Section 4(f)/6(f)	/ /
		EPE DRAFT ANALYSIS (cont'd)	
	Х	2313 Endangered Species Survey	/ /
	Х	2314 Wetland Assessment	/ /
	Х	2315 Wetland Mitigation	/ /
	Х	2316 Other Technical Reports	/ /
	Х	2321 Prepare for Aerial Photography	/ /
	Х	2322 Finish/Print Aerial Photography	/ /
	Х	2330 Collect EPE Geotechnical Data	/ /
	Х	2340 Develop and Review Practical Alternatives	/ /
$\overline{\sqcap}$	Х	233M Aerial Photography Flight	/ /
	Х	2360 Prepare and Review EA	/ /
	Х	236M Approval of EA by FHWA	/ /
	Х	2370 Prepare and Review Draft EIS	/ /
	Х	237M Approval of Draft EIS by FHWA	/ /
	Х	2380 Distribute EA	/ /
	Х	238M Public Hearing for EA	/ /
	Х	2390 Distribute DEIS	/ /
	х	239M Public Hearing for DEIS	/ /
		EPE FINAL ANALYSIS	
	Х	2510 Determine and Review Recommended Alternative	/ /
	Χ	250M Concurrence by Reg Agencies with Recom Alternatives	/ /
	Х	2525 Prepare and Review Engineering Report	/ /
	Х	2530 Prepare and Review Request for FONSI	/ /
	Х	252M Approval of FONSI by FHWA	/ /
	Х	2540 Prepare and Review FEIS	/ /
	Х	254M Approval of FEIS by FHWA	/ /
	Х	2550 Obtain ROD	/ /
	Х	255M ROD Issued by FHWA	/ /
	Х	2570 ITS Concept of Operations	/ /

# **CONTAMINATION INVESTIGATION**

Х	2810	Project Area Contamination Survey (PCS)	/	/
Х	2820	Preliminary Site Investigation (PSI) for Contamination	/	/

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

# PRELIMINARY ENGINEERING - DESIGN

YES	NO		P/PMS TASK NUMBER AND DESCRIPTION	DATE 1 COMPLE (mm/dd	TED BY
		DESIG	N SCOPE VERIFICATION AND BASE PLAN	(	- 3 3 3 3 7
		PREPA	ARATION		
	X	3130	Verify Design Scope of Work and Cost	/	/
	X	3310	Prepare Aerial Topographic Mapping	/	/
	X	3320	Conduct Photogrammetric Control Survey	/	/
	X	3321	Set Aerial Photo Targets	/	/
	X	3325	Geotechnical Structure Site Characterization	/	/
X		3330	Conduct Design Survey	/	/
	X	3340	Conduct Structure Survey	/	/
	X	3350	Conduct Hydraulics Survey	/	/
X		3360	Prepare Base Plans	/	/
	X	<u>311M</u>	Utility Notification	/	/
	X	3365	Pre-Conceptual ITS Design and Meeting	/	/
	X	3370	Prepare Structure Study	/	/
	X	3375	Conduct Value Engineering Study	/	/
	X	3380	Review Base Plans	/	/
	X	3385	Preliminary Load Rating	/	/
	X	<u>332M</u>	Base Plan Review (Pre-GI Inspection)	/	/
X		3390	Develop the Maintaining Traffic Concepts	/	/
		PRELI	MINARY PLANS PREPARATION		
X		3500	Develop Transportation Management Plan	/	/
	X	3510	Perform Roadway Geotechnical Investigation	/	/
	X	3520	Conduct Hydraulic/Hydrologic and Scour Analysis	/	/
	x	3522	Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	/	/
	X	3530	Geotechnical Foundation Engineering Report	/	/
	X	3535	Conduct Str. Review for Arch. & Aesthetic Improvements	/	/
X		3540	Develop the Maintaining Traffic Plan	/	/
X		3551	Prepare/Review Preliminary Traffic Signal Design Plan	/	/
	X	3552	Develop Preliminary Pavement Marking Plan	/	/
	X	3553	Develop Preliminary Non-Freeway Signing Plan	/	/
	X	3554	Develop Preliminary Freeway Signing Plan	/	/
	X	3555	Prepare/Review Preliminary Traffic Signal Operations	/	/
	X	3570	Prepare Preliminary Structure Plans	/	/

X		3580	Develop Preliminary Plans	/	/
	X	3585	Final ITS Concept Design and Meeting	/	/
	X	3590	Review The Plans	/	/
	X	352M	THE Plan Review Meeting	/	/
	x	3595	Conduct ITS Structure Foundation Investigation	/	/

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

# PRELIMINARY ENGINEERING - DESIGN (cont'd)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
		<u>UTILITIES</u>	, , , , , , , , , , , , , , , , , , , ,
X		3610 Compile Utility Information	/ /
	X	3615 Compile ITS Utility Information	/ /
	X	3650 Coordinate RR Involvement for Grade Separations	/ /
	X	3655 Coordinate RR Involvement for At-Grade Crossings	/ /
X		3660 Resolve Utility Issues	/ /
	x	360M Utility Conflict Resolution Plan Distribution	/ /
X		361M Utility Meeting	/ /
	X	3670 Develop Municipal Utility Plans	/ /
	X	3672 Develop Special Drainage Structures Plans	/ /
	X	3675 Develop Electrical Plans	/ /
	X	3680 Preliminary ITS Communication Analysis	/ /
	x	3690 Power Design (Power Drop in Field)	/ /
		MITIGATION/PERMITS	
	X	3710 Develop Required Mitigation	/ /
	x	3720 Assemble Environmental Permit Applications	/ /
	x	3730 Obtain Environmental Permit	/ /
		FINAL PLAN PREPARATION	
	x	3815 Geotechnical Structure Design Review	/ /
X		3821 Prepare/Review Final Traffic Signal Design Plan	/ /
	X	3822 Complete Permanent Pavement Marking Plan	/ /
	X	3823 Complete Non-Freeway Signing Plan	/ /
	X	3824 Complete Freeway Signing Plan	/ /
	X	3825 Prepare/Review Final Traffic Signal Operations	/ /
X		3830 Complete the Maintaining Traffic Plan	/ /
X		3840 Develop Final Plans and Specifications	/ /
	X	380M Plan Completion	/ /
	X	3850 Develop Structure Final Plans and Specifications	/ /
X		3870 Hold Omissions/Errors Check (OEC) Meeting	/ /
	X	3875 Final Load Rating	/ /

X	387M	Omissions/Errors Checks Meeting	/	/
X	389M	<u>Plan Turn-In</u>	/	/
X	3880	CPM Quality Assurance Review	/	/
X	3890	Final ITS Communication Analysis	/	/

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

# PRELIMINARY ENGINEERING - RIGHT OF WAY

YES	P/PMS TASK NUMBER AND DESCRIPTION YES NO		DATE TO BE COMPLETED BY (mm/dd/yyyy)		
		EARLY RIGHT OF WAY WORK			
	X	4100 Real Estate Pre-Technical Work (combines 411M, 4120)	/	/	
	X	4150 Real Estate Technical Work (combines 4130, 4140)	/	/	
	X	413M Approved Marked Final ROW	/	/	
	x	ROW APPRAISAL 4350 Real Estate Appraisals (combines 4411, 4412, 4413, 4420)	/	/	
		ROW ACQUISITION			
	x	4450 Real Estate Acquisitions (combines 4430, 4710, 4720)	/	/	
	X	4510 Conduct Right Of Way Survey & Staking	/	/	
	x	442M ROW Certification	/	/	

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

# **POST LETTING/AWARD TASKS (for reference only)**

YES	NO		COMPLETED BY (mm/dd/yyyy)		
	X	4810	Complete Acquisition Process	/	/
	X	4820	Manage Excess Real Estate	/	/
	X	4830	Provide Post-Certification Relocation Assistance	/	/
	X	4910	Conduct ROW Monumentation	/	/
	X	5010	Construction Phase Engineering and Assistance	/	/
	X	5020	Prepare As-Built Drawings	/	/

# **CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

All billings for services must be directed to the Department and follow the current guidelines. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

MDOT will reimburse the consultant for **vehicle expenses** and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at <a href="http://www.michigan.gov/documents/mdot/Final\_Travel\_Guidelines\_05-01-13\_420289\_7.pdf?20130509082418">http://www.michigan.gov/documents/mdot/Final\_Travel\_Guidelines\_05-01-13\_420289\_7.pdf?20130509082418</a>. MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay **overtime** in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at <a href="http://www.michigan.gov/documents/mdot/Final Overtime Guidelines 05-01-13-420286-7.pdf?20130509081848">http://www.michigan.gov/documents/mdot/Final Overtime Guidelines 05-01-13-420286-7.pdf?20130509081848</a>. MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

#### **ATTACHMENT A**

# SCOPE OF SERVICE FOR DESIGN SURVEYS

March 2015

Survey Limits: As needed for Design, Right of Way, and Construction. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

#### **NOTES:**

The Selected Consultant shall discuss the scope of this survey with an MDOT Region Surveyor or an MDOT Lansing Design Surveyor before submitting a priced proposal.

The Selected Consultant surveyor must contact the Region or TSC Traffic and Safety Engineer for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan <u>must</u>** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as horizontal control, leveling, mapping, alignment determination, etc., <u>must</u> be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

# **GENERAL REQUIREMENTS:**

- 1. Surveys must comply with **all Michigan law** relative to land surveying.
- 2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan, according to Public Act 299 of 1980.
- 3. Work in any of the following categories of survey: Road Design, Structure, Hydraulics, Right-of-Way, Remote Sensing, Remote Sensing Ground Control, and/or Geodetic Control must be completed by a survey firm which is pre-qualified by MDOT for that category.
- 4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated May 2014, except for naming conventions. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.

- 5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section.
- 6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).
- 7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.
- 8. The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
- 9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.
- 10. Measurements, stationing, recorded data, and computations must be in **International Feet**, unless specified otherwise by the MDOT Project Manager.
- 11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83. All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan and subsequent submittal.
- 12. **Electronic submittal only.** Survey notes must be submitted to the Design Survey Unit in ProjectWise, in the appropriate Survey-Classification Folder Template with appropriate Subfolders. **No raw data** shall be submitted in ProjectWise.
- 13. Each Survey-Classification Folder is divided into six sections. These sections are as follows: **Administrative, Alignment, Control, Property, Deliverables for Engineers,** and **Miscellaneous**.
- 14. To be included in the Administrative section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, May 2014 revision, available from the MDOT Survey

  Support Unit. This document shall be signed and certified by the Professional Surveyor

  responsible for the project QA/QC. It is highly recommended that the consultant become
  familiar with this document prior to preparing the proposal and again prior to assembling
  the final portfolio. **Failure to use and include this document may result in the immediate return of the project portfolio for completion.**

- 15. <u>All</u> submitted files must be scanned and/or converted to one PDF format file. A Table of Contents in PDF format is required that has all PDF files bookmarked/linked so each place in the PDF archive can be accessed with a single click of the computer mouse. Specified format files such as Microsoft Word and MicroStation GeoPak must have separate access in native format outside of the PDF file.
- 16. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor. The MDOT Project Manager must be copied on any and all correspondence.

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be submitted electronically** to MDOT ProjectWise. Please include MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must also be sent to the MDOT Project Manager for Design.

Acceptance of this survey by the MDOT Supervising Land Surveyor and/or the MDOT Project Manager does not relieve the Consultant of any liability for the content of the survey.

#### **WORK RESTRICTIONS**

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT Traffic and Safety Engineer at the closest MDOT TSC prior to submitting a priced proposal. *Add Name and phone # of appropriate engineer*. Traffic Control costs not included in the priced proposal will not be paid by MDOT.

No work shall be performed or lane closures allowed during the Memorial Day, July 4<sup>th</sup>, or Labor Day holiday periods, as defined by the MDOT Project Manager or representative specifically designated by the Project Manager, usually the Traffic & Safety Engineer at the MDOT TSC.

Work on weekends, if approved, shall be as directed by the MDOT Project Manager or Designate.

The Consultant must call the MDOT Region or TSC Traffic and Safety Engineer before beginning work to inform him or her of surveying activity in the area. The MDOT Region or TSC must be notified at least two weeks prior to lane closures so advance notice can be posted on the Web site.

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction*, 2012 edition, <a href="http://mdotcf.state.mi.us/public/specbook/2012/">http://mdotcf.state.mi.us/public/specbook/2012/</a> and any Supplemental Specifications currently in effect clarifying the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard "maintaining traffic" typicals for any and all closures. Typical MDOT traffic control diagrams are available on line at <a href="http://mdotcf.state.mi.us/public/tands/plans.cfm">http://mdotcf.state.mi.us/public/tands/plans.cfm</a>

#### COORDINATION WITH OTHER CONTRACTS IN THE VICINITY

The Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Consultant.

The Consultant must contact the Development Engineer at the nearest MDOT TSC for information regarding project coordination.

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.08 of the 2012 Standard Specifications for Construction <a href="http://mdotcf.state.mi.us/public/specbook/2012/">http://mdotcf.state.mi.us/public/specbook/2012/</a>. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete work unit scheduled.

## POST SURVEY CLEAN-UP

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

#### FINAL REPORT: DELIVERABLES

The final report for this project shall include:

1. In the **ADMINISTRATIVE subfolder**, the following will appear:

- a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
- b. The project's Professional Surveyor's Report on company letterhead, consisting of:
  - i) A comprehensive synopsis of the work performed on this project, signed and sealed by the project's Professional Surveyor.
  - ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
  - iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
- c. A master PDF file, named JN123456C TaskXXXX, containing documents and files scanned or converted to PDF format. Each Section and sub-section of this PDF file must be bookmarked for easy retrieval. An example can be provided upon request.
- d. MDOT QA/QC Portfolio Checklist (revised May 2014).
- 2. In the **ALIGNMENT subfolder**, the following will appear:
  - a. An annotated MicroStation drawing of the alignment(s), showing:
    - i) A statement defining the alignment(s) as **legal or non-legal**, and a key box with description of type and origin of all alignments, such as 1958 Survey Alignment,1966 Construction Alignment or, 2013 As Constructed Alignment
    - ii) Alignment files must use the naming conventions in the MDOT Design Wiki at http://mdotwiki.state.mi.us/design/index.php/Chapter\_3\_\_Standard\_Naming\_Convent ions
    - iii) Stationing, source of stationing, and station equation to existing stationing
    - iv) Curve data, including coordinates of P.I.s, P.C.s, and P.T.s.
    - v) Physical alignment points found or set
    - vi) Control points
    - vii) Reference lines and angles of crossing (if appropriate)
    - viii) Government corners with bearing and distance ties to alignment along the government lines.

- b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. WITNESS LISTS MUST USE ONLY UPPER CASE LETTERS.
- c. LCRC's for legal alignment points with physical monumentation, found or set.
- 3. In the **CONTROL** subfolder, the following will appear:
  - a. Documentation of horizontal and vertical datum sources.
  - b. OPUS documentation, long version.
  - c. Least squares adjustments for the horizontal and vertical control.
  - d. Text files which contain the witness lists for the horizontal alignment points, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof. WITNESS LISTS MUST USE ONLY UPPERCASE LETTERS.
  - e. An MDOT-formatted Microsoft Word file, **SurveyInfoSheet.doc**, showing the data in e. above, using ONLY UPPER CASE LETTERS.
- 4. In the **PROPERTY subfolder** the following will appear:
  - a. Tax maps and tax descriptions with owner names, addresses and phone numbers if Right of Way is to be acquired, or if riparian ownerships are required.
  - b. Maps, plats, and recorded surveys.
  - c. Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
  - d. Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.
- 5. In the **DELIVERABLES FOR ENGINEERS subfolder**, the following will appear:
  - a. Mapping files in MDOT MicroStation V8i format in the current MDOT workspace, and also converted to PDF format. ALL POINT AND LINE DESCRIPTIONS MUST USE ONLY UPPER CASE LETTERS.
  - b. File names must be as shown in the MDOT Design Wiki

http://mdotwiki.state.mi.us/design/index.php/Chapter\_3\_\_Standard\_Naming\_Conventions

- c. All Geopak design files produced by survey, including: .xml alignment files, triangle.dgn file, .dtm, and .tin files.
- d. All field survey notes used for the project.
- e. All supporting and supplemental information or data, such as drainage and utilities, electronically only.

# 6. In the **MISCELLANEOUS subfolder**, the following will appear:

- a. Any photographs taken for clarity of an area
- b. Any newspaper clippings related to the project
- c. Any information not covered in this scope that will be of benefit to the designer or another surveyor